Authorized Federal Supply Service
Information Technology Schedule Pricelist
General Purpose Commercial Information Technology Services

Information Technology Schedule

SIN 132-50 - Information Technology (IT) Training, Courses

> FPDS Code U012 Information Technology Equipment and Software

SIN 132-51 - Information Technology (IT) Professional Services

> FPDS Code D302 IT Systems Development Services
> FPDS Code D306 IT Systems Analysis Services
> FPDS Code D307 Automated Information Systems Design and Integration Services
> FPDS Code D308 Programming Services
> FPDS Code D311 IT Data Conversion Services
> FPDS Code D317 Automated News Services, Data Services, or Other Information Services
> FPDS Code D399 Other Information Technology Services, Not Elsewhere Classified

Note 1: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Note 2: Offerors and Agencies are advised that the Group 70 - Information Technology Schedule is <u>not</u> to be used as a means to procure services which properly fall under the Brooks Act. These services include, but are not limited to, architectural, engineering, mapping, cartographic production, remote sensing, geographic information systems, and related services. FAR 36.6 distinguishes between mapping services of an A/E nature and mapping services which are not connected nor incidental to the traditionally accepted A/E Services.

Note 3: This solicitation is not intended to solicit for the reselling of IT Professional Services, except for the provision of implementation, maintenance, integration, or training services in direct support of a product. Under such circumstances the services must be performance by the publisher or manufacturer or one of their authorized agents.

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Emergint Technologies, Inc.
455 South Fourth Street
Suite 1250
Louisville, KY 40202
(502) 896-6210 phone
(502) 896-6170 facsimile
govsales@emergint.com
http://www.emergint.com

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Contract Number: GS-35F-0424S
Period Covered by Contract: May 18, 2006 through May 17, 2011

Contract Administration: Debbie Fallick
Business Size: Small Business

General Services Administration Federal Supply Service Pricelist current through Emergint Technologies, Inc. commercial price list, dated May 16, 2006.

Products and ordering information in this Authorized FSS Information Technology Schedule Pricelist are also available on the GSA Advantage! System. Agencies can browse GSA Advantage! by accessing the Federal Supply Service s Home Page via the Internet at http://www.fss.gsa.gov/

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Information for Ordering Activities

Emergint Technologies, Inc.
- Corporate headquarters in Louisville, Kentucky
- 8(a) and SDB Certified through November, 2011
- 30 years of proven Federal Sector Contracting experience

Data Services

Disparate data source integration
- Clinical, Financial and other data types

Enterprise Application Integration
- HL7, standardized transactional data, non-transactional data (feeds, batches and dumps), and non-standardized data

Enterprise Architecture
- High volume, real-time messaging
- Process and Queue deployment and management
- Rules-based filters and routing

Vocabulary Harmonization
- Proprietary to Standards-based codes & Vocab
- Semantic Networks, Ontology development, Concepts/CUIs
- UMLS and other Thesauri
- Language processing

Visualization
- N-Tiered Web development and services
- Custom portal development
- Free Text Search Engines
- GIS with ESRI tools
  - ArcGIS Suite v. 8.x
  - ArcIMS
  - ArcSDE

Analysis
- Statistical Analysis
- SAS/SPSS
- GIS
- ESRI Spatial Analyst Extension
- Epidemiology
- Public Health Surveillance
- HIV/AIDS, TB & Birth Defects

Frequently Asked Questions On The Use of a GSA MAS

- **What is the GSA Multiple Award Schedule (GSA MAS)?**
- **What exactly is the difference between a GWAC and a Multiple Award Schedule contract?**
- **What is the difference between the GSA MAS IDIQ and other agencies' IDIQ contracts?**
- **How is purchasing from MAS better than purchasing on the open market?**
- **What is the new Maximum Order Threshold?**
- **Can an agency use a Government credit card for payment?**
- **How can an agency be certain that they will always be able to get the latest technology under Schedule?**
- **Is it true ordering form MAS is as easy as 1-2-3?**

What is the GSA Multiple Award Schedule (GSA MAS)?

The GSA Multiple Award Schedule (GSA MAS) is an Indefinite Quantity, Indefinite Delivery (IDIQ) contract available to all Federal, State, and local government agencies world-wide. Agencies place orders directly with the contractor. The middle man has been removed and the process shortened. But, best of all the GSA MAS can be used to purchase a wide variety of ADP products and services.

What exactly is the difference between a GWAC and a Multiple Award Schedule contract?

A Multiple Award Schedule (MAS) is an Indefinite Quantity, Indefinite Delivery (IDIQ) contract available to all Federal, State, and local government agencies world-wide. Agencies place orders directly with the contractor. The middle man has been removed. Interagency Agreements are not required to use Multiple Award Schedules.

GWACs are contracts for various information technology resources awarded by one Federal agency. All other Federal agencies can use the GWAC contract, on a limited basis. The awarding agency establishes the maximum value of the contract based on their requirements and adds an additional 20% for other agencies.

What is the difference between the GSA MAS IDIQ and other agencies' IDIQ contracts?

The GSA MAS program provides Federal customers with over 4 million products from more that 6,000 vendors around the world.

Other agencies' IDIQ contracts are primarily used by the awarding agency. Other agency use is limited. In most instances ordering must go through the agency that awarded the contract. Most require approval letters, documentation for best value selection, price determination, etc.

How is purchasing from MAS better than purchasing on the open market?

- GSA has already determined the price to be fair and reasonable. Synopsis is not required.
- MAS contracts have been awarded in compliance with all applicable laws and regulation
- Administrative time is reduced
- Ordering is easy. There is a wide selection of commercial items available.

What is the new Maximum Order Threshold?

The new commercial practice brings more value and choice to customers. Customer orders will no longer be restricted by a maximum order limitation. New procedures have been developed that allow schedule contractors to accept "any size" order.

Can an agency use a Government credit card for payment?

Acceptance of the government credit card is strongly encouraged and GSA requires their contractors to have that capability. ETI will accept credit cards when required by GSA and for all orders of $2500 or less.

How can an agency be certain that they will always be able to get the latest technology under Schedule?

Using the GSA modification process, schedule contractors can continually refresh their MAS contracts. A continual open season permits offers to be submitted to GSA at any time.

Is it true ordering form MAS is as easy as 1-2-3?

YES! An Agency simply:

1. Obtain the Federal Supply Schedule or use the GSA Advantage (http://www.gsa.gov).
2. Review products and/or services to make a best value selection.
3. Contact the selected Contractor.
4. Place an order in compliance with the contract and applicable regulations.
5. Place an order as follows:

> Emergint Technologies, Inc.
> 455 South Fourth Street
> Suite 1250
> Louisville, Kentucky 40202
> Attention: Contracts

Multiple Award Schedule (MAS)
Emergint Technologies, Inc. GSA MAS Contract

The Emergint Technologies GSA Multiple Award Schedule (GSA MAS) contract is an Indefinite Delivery, Indefinite Quantity (IDIQ) contract available to all Federal, State, and local government agencies world wide. The period of performance for this contract is date of contract award for a period of five years unless extended by GSA.

Emergint's professional capabilities span the entire spectrum of Information Technology services including:

- Computer Operation
- Computer Programming
- Customer Service Support
- Data Communications
- Data Management and Verification
- Data Warehousing
- Database Analysis, Design, Implementation, Conversion, and Administration
- Desktop Publishing
- Document Conversion
- Documentation/Technical Writing
- Geographical Information Systems Support and Analysis
- Graphics Design
- Hardware/Software Installation, Support, and Troubleshooting

- Help Desk Support
- Information Access Services
- Knowledge Management Systems
- Internet Access: FTP, Telnet, E-Mail
- Network Administration, Planning, Integration, and Support
- Office Automation
- Online Research Services
- Optical Character Recognition Support
- Project Management
- Records Management
- Software Development and Maintenance
- Storage Area Networking
- System Integration
- Systems Analysis, Design, and Recommendations
- Training
- Web Authoring/Page Development, Design, and Implementation
- Telephony and Telefonics Systems Support
- Workflow Management Systems

SPECIAL NOTICE TO AGENCIES: Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Supply Schedules Program. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micro-purchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!K on-line shopping service (www.fss.gsa.gov). The catalogs/pricelists, GSA Advantage! and the Federal Supply Service Home Page (www.fss.gsa.gov) contain information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micropurchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1.   Geographic Scope of Contract:

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

Offerors are requested to check one of the following boxes:

[ ]   The Geographic Scope of Contract will be domestic and overseas delivery.
[ ]   The Geographic Scope of Contract will be overseas delivery only.
[**X**]   The Geographic Scope of Contract will be domestic delivery only.

_____

2.   Contractor's Ordering Address and Payment Information:

Ordering Address:	Payment Address
Emergint Technologies, Inc. Attention: Contracts 455 South Fourth Street Suite 1250 Louisville, KY 40202 (502) 896-6210 phone (502) 896-6170 facsimilé	Emergint Technologies, Inc. Attention: Contracts 455 South Fourth Street Suite 1250 Louisville, KY 40202 (502) 896-6210 phone (502) 896-6170 facsimilé

Contractors are required to accept credit cards for payments equal to or less than the micro-purchase threshold for oral or written delivery orders. Credit cards will not be acceptable for payment above the micro-purchase threshold. In addition, bank account information for wire transfer payments will be shown on the invoice.

The following telephone number(s) can be used by ordering activities to obtain technical and/or ordering assistance:

(502) 896-6210

3.   LIABILITY FOR INJURY OR DAMAGE

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4. STATISTICAL DATA FOR GOVT ORDERING OFFICE COMPLETION OF STANDARD FORM 279:

Block 9: **G. Order/Modification Under Federal Schedule**
Block 16: Data Universal Numbering System (DUNS) Number: **015545267**
Block 30: Type of Contractor – **A. Small Disadvantaged Business**
Block 31: Woman-Owned Small Business - **No**
Block 36: Contractor's Taxpayer Identification Number (TIN): **58-2498699**
4a.   CAGE Code: **3CRK7**
4b.   Contractor has registered with the Central Contractor Registration Database.

5.   FOB Destination

6.   DELIVERY SCHEDULE:

a.   TIME OF DELIVERY: The Contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER	DELIVERY TIME (Days ARO)
132-50 Software Training	As agreed upon between contractor and ordering activity
132-51 Professional IT Services	As agreed upon between contractor and ordering activity

b.   URGENT REQUIREMENTS: When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering activity, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7.   Discounts: Prices shown are NET Prices; Basic Discounts have been deducted.

8.   Trade Agreements Act of 1979, as amended:

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9.   Statement Concerning Availability of Export Packing: **None**

10.   Small Requirements: The minimum dollar value of orders to be issued is $100.00.

11.   Maximum Order (All dollar amounts are exclusive of any discount for prompt payment.)

a. The Maximum Order value for the following Special Item Numbers (SINs) is $500,000.

Special Item Number 132-51 - Information Technology (IT) Professional Services

b. The Maximum Order value for the following Special Item Numbers (SINs) is $25,000.

Special Item Number 132-50 – Information Technology (IT) Training, Courses

12. ORDERING PROCEEDURES FOR FEDERAL SUPPLY SCHEDULE CONTRACTS

Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

a. FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.

b. FAR 8.405-2 Ordering procedures for services requiring a statement of work.

13. FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS: ordering activities acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1 FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS): Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

14. CONTRACTOR TASKS / SPECIAL REQUIREMENTS (C-FSS-370) (NOV 2001)

(a) Security Clearances: The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

(b) Travel: The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. The Industrial Funding Fee does NOT apply to travel and per diem charges.

NOTE: Refer to FAR Part 31.205-46 Travel Costs, for allowable costs that pertain to official company business travel in regards to this contract.

(c) Certifications, Licenses and Accreditations: As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific

FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

(d)   Insurance: As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

(e)   Personnel: The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

(f)   Organizational Conflicts of Interest: Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

(g)   Documentation/Standards: The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

(h)   Data/Deliverable Requirements: Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

(i)   Government-Furnished Property: As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

(j)   Availability of Funds: Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

15.   CONTRACT ADMINISTRATION FOR ORDERING ACTIVITIES: Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See C.1.)

16.   GSA Advantage!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

    (1)   Manufacturer;
    (2)   Manufacturer's Part Number; and
    (3)   Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: Internet Explorer). The Internet address is http://www.fss.gsa.gov/.

17.   PURCHASE OF OPEN MARKET ITEMS

NOTE: Open Market Items are also known as incidental items, non-contract items, non-Schedule items, and items not on a Federal Supply Schedule contract. Other Direct Costs (ODCs) are not part of this contract and should be treated as open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Supply Multiple Award Schedule (MAS) -- referred to as open market items -- to a Federal Supply Schedule blanket purchase agreement (BPA) or an individual task or delivery order, **only if**-

(1) All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Supply Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

(2) The ordering activity contracting officer has determined the price for the items not on the Federal Supply Schedule is fair and reasonable;

(3) The items are clearly labeled on the order as items not on the Federal Supply Schedule; and

(4) All clauses applicable to items not on the Federal Supply Schedule are included in the order.

18. CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a. For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

(1) Time of delivery/installation quotations for individual orders;

(2) Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

(3) Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b. The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19. BLANKET PURCHASE AGREEMENTS (BPAs)

The use of BPAs under any schedule contract to fill repetitive needs for supplies or services is allowable. BPAs may be established with one or more schedule contractors. The number of BPAs to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPA(s).

20. CONTRACTOR TEAM ARRANGEMENTS

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74 Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

21. INSTALLATION, DEINSTALLATION, REINSTALLATION

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall received less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements contained in the Davis-Bacon Act apply.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, de-installation, and reinstallation services under SIN 132-8.

22.   SECTION 508 COMPLIANCE.

If applicable, Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT) at the following:

> www.abccomp.com

The EIT standard can be found at: www.Section508.gov/.

23.   **PRIME CONTRACTOR ORDERING FROM FEDERAL SUPPLY SCHEDULES.**

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Supply Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order –

   (a) A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was previously furnished to the Federal Supply Schedule contractor); and

   (b) The following statement:

   This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule contract, the latter will govern.

24.   **INSURANCE—WORK ON A GOVERNMENT INSTALLATION (JAN 1997) (FAR 52.228-5)**

(a)   The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b)   Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

   (1) For such period as the laws of the State in which this contract is to be performed prescribe; or

(2) Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c)   The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

25.   **SOFTWARE INTEROPERABILITY.**

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at **http://www.core.gov**.

26.   **ADVANCE PAYMENTS**

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324)

Terms and Conditions Applicable to Information Technology (IT) Professional Services (Special Item Number 132-51)

Payment Terms:	Net 30 days
Discount for Prompt Payment:	None
Minimum Order:	$100.00
Maximum Order:	$500,000
Invoice Mailing Address:	455 South Fourth Street
	Suite 1250
	Louisville, Kentucky 40202
F.O.B.:	Destination

SIN 132-51: IT Professional Services Labor Rates – ONSITE (Govt Agency)

	Labor Category	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Year 6 2011
1	Senior Project Manager	127.73	134.11	140.82	147.86	155.25	163.01
2	Project Manager	87.40	91.77	96.36	101.18	106.24	111.55
3	Computer Systems Analyst I	54.47	57.19	60.05	63.05	66.20	69.51
4	Computer Systems Analyst II	69.95	73.45	77.12	80.98	85.03	89.28
5	Computer Systems Analyst III	94.21	98.92	103.87	109.06	114.51	120.24
6	Computer Systems Analyst IV	95.86	100.65	105.68	110.96	116.51	122.34
7	Computer Systems Analyst V	97.51	102.38	107.50	112.88	118.52	124.45
8	Computer Programmer I	47.50	49.88	52.37	54.99	57.74	60.63
9	Computer Programmer II	53.22	55.88	58.67	61.60	64.68	67.91
10	Computer Programmer III	67.67	71.05	74.60	78.33	82.25	86.36
11	Computer Programmer IV	92.68	97.31	102.18	107.29	112.65	118.28
12	Computer Programmer V	95.00	99.75	104.74	109.98	115.48	121.25
13	Database Manager	93.69	98.37	103.29	108.45	113.87	119.56
14	Database Specialist I	57.06	59.91	62.91	66.06	69.36	72.83
15	Database Specialist II	77.14	81.00	85.05	89.30	93.77	98.46
16	Database Specialist III	87.16	91.52	96.10	100.91	105.96	111.26
17	Database Specialist IV	93.69	98.37	103.29	108.45	113.87	119.56
18	Database Specialist V	104.83	110.07	115.57	121.35	127.42	133.79
19	Database Analyst	77.90	81.80	85.89	90.18	94.69	99.42
20	Subject Matter Specialist I	61.55	64.63	67.86	71.25	74.81	78.55
21	Subject Matter Specialist II	70.71	74.25	77.96	81.86	85.95	90.25
22	Subject Matter Specialist III	76.57	80.40	84.42	88.64	93.07	97.72
23	Subject Matter Specialist IV	82.27	86.38	90.70	95.24	100.00	105.00
24	Subject Matter Specialist V	87.97	92.37	96.99	101.84	106.93	112.28
25	Web Developer	75.01	78.76	82.70	86.84	91.18	95.74
26	Network Administrator	59.80	62.79	65.93	69.23	72.69	76.32
27	Senior Network Administrator	78.33	82.25	86.36	90.68	95.21	99.97
28	Network Technician	48.95	51.40	53.97	56.67	59.50	62.48
29	Senior Network Technician	59.62	62.60	65.73	69.02	72.47	76.09
30	Technical Information Specialist I	53.94	56.64	59.47	62.44	65.56	68.84
31	Technical Information Specialist II	69.88	73.37	77.04	80.89	84.93	89.18
32	Technical Information Specialist III	87.16	91.52	96.10	100.91	105.96	111.26
33	Training Specialist	85.09	89.34	93.81	98.50	103.43	108.60
34	CAD Specialist	44.64	46.87	49.21	51.67	54.25	56.96
35	Computer Security Systems Specialist	83.76	87.95	92.35	96.97	101.82	106.91
36	Computer Operator I	35.26	37.02	38.87	40.81	42.85	44.99
37	Computer Operator II	40.61	42.64	44.77	47.01	49.36	51.83
38	Computer Operator III	47.82	50.21	52.72	55.36	58.13	61.04
39	Computer Operator IV	89.61	94.09	98.79	103.73	108.92	114.37
40	Documentation Specialist	44.89	47.13	49.49	51.96	54.56	57.29
41	Graphics Specialist	53.08	55.73	58.52	61.45	64.52	67.75
42	Help Desk Specialist	47.47	49.84	52.33	54.95	57.70	60.59
43	Quality Assurance Specialist	77.90	81.80	85.89	90.18	94.69	99.42
44	Technical Writer/Editor	41.32	43.38	45.55	47.83	50.22	52.73
45	Senior Technical Writer/Editor	70.46	73.98	77.68	81.56	85.64	89.92
46	Medical /Clinical Informatics Specialist I	64.45	67.67	71.05	74.60	78.33	82.25

SIN 132-51: IT Professional Services Labor Rates – ONSITE (Govt Agency)

	Labor Category	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Year 6 2011
47	Medical /Clinical Informatics Specialist II	64.45	67.67	71.05	74.60	78.33	82.25
48	Medical /Clinical Informatics Specialist III	64.45	67.67	71.05	74.60	78.33	82.25
49	Medical /Clinical Informatics Specialist IV	105.26	110.52	116.05	121.85	127.94	134.34
50	Medical /Clinical Informatics Specialist V	145.03	152.28	159.89	167.88	176.27	185.08
51	Medical /Clinical Informatics Specialist VI	161.14	169.20	177.66	186.54	195.87	205.66
52	Bioinformatics Specialist I	48.34	50.76	53.30	55.97	58.77	61.71
53	Bioinformatics Specialist II	59.08	62.03	65.13	68.39	71.81	75.40
54	Bioinformatics Specialist III	64.45	67.67	71.05	74.60	78.33	82.25

SIN 132-51: IT Professional Services Labor Rates – OFFSITE (Emergint Facility)

	Labor Category	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Year 6 2011
1	Senior Project Manager	148.48	155.90	163.70	171.89	180.48	189.50
2	Project Manager	101.60	106.68	112.01	117.61	123.49	129.66
3	Computer Systems Analyst I	63.32	66.49	69.81	73.30	76.97	80.82
4	Computer Systems Analyst II	81.31	85.38	89.65	94.13	98.84	103.78
5	Computer Systems Analyst III	109.52	115.00	120.75	126.79	133.13	139.79
6	Computer Systems Analyst IV	111.43	117.00	122.85	128.99	135.44	142.21
7	Computer Systems Analyst V	113.35	119.02	124.97	131.22	137.78	144.67
8	Computer Programmer I	55.22	57.98	60.88	63.92	67.12	70.48
9	Computer Programmer II	61.87	64.96	68.21	71.62	75.20	78.96
10	Computer Programmer III	78.66	82.59	86.72	91.06	95.61	100.39
11	Computer Programmer IV	107.74	113.13	118.79	124.73	130.97	137.52
12	Computer Programmer V	110.43	115.95	121.75	127.84	134.23	140.94
13	Database Manager	108.91	114.36	120.08	126.08	132.38	139.00
14	Database Specialist I	66.33	69.65	73.13	76.79	80.63	84.66
15	Database Specialist II	89.67	94.15	98.86	103.80	108.99	114.44
16	Database Specialist III	101.32	106.39	111.71	117.30	123.17	129.33
17	Database Specialist IV	108.91	114.36	120.08	126.08	132.38	139.00
18	Database Specialist V	121.86	127.95	134.35	141.07	148.12	155.53
19	Database Analyst	90.56	95.09	99.84	104.83	110.07	115.57
20	Subject Matter Specialist I	71.55	75.13	78.89	82.83	86.97	91.32
21	Subject Matter Specialist II	82.20	86.31	90.63	95.16	99.92	104.92
22	Subject Matter Specialist III	89.01	93.46	98.13	103.04	108.19	113.60
23	Subject Matter Specialist IV	95.64	100.42	105.44	110.71	116.25	122.06
24	Subject Matter Specialist V	102.26	107.37	112.74	118.38	124.30	130.52
25	Web Developer	87.20	91.56	96.14	100.95	106.00	111.30
26	Network Administrator	69.52	73.00	76.65	80.48	84.50	88.73
27	Senior Network Administrator	91.06	95.61	100.39	105.41	110.68	116.21
28	Network Technician	56.90	59.75	62.74	65.88	69.17	72.63
29	Senior Network Technician	69.31	72.78	76.42	80.24	84.25	88.46
30	Technical Information Specialist I	62.70	65.84	69.13	72.59	76.22	80.03
31	Technical Information Specialist II	81.23	85.29	89.55	94.03	98.73	103.67
32	Technical Information Specialist III	101.32	106.39	111.71	117.30	123.17	129.33
33	Training Specialist	98.91	103.86	109.05	114.50	120.23	126.24
34	CAD Specialist	51.89	54.48	57.20	60.06	63.06	66.21
35	Computer Security Systems Specialist	97.37	102.24	107.35	112.72	118.36	124.28
36	Computer Operator I	40.99	43.04	45.19	47.45	49.82	52.31
37	Computer Operator II	47.21	49.57	52.05	54.65	57.38	60.25
38	Computer Operator III	55.59	58.37	61.29	64.35	67.57	70.95
39	Computer Operator IV	104.17	109.38	114.85	120.59	126.62	132.95
40	Documentation Specialist	52.18	54.79	57.53	60.41	63.43	66.60
41	Graphics Specialist	61.70	64.79	68.03	71.43	75.00	78.75
42	Help Desk Specialist	55.18	57.94	60.84	63.88	67.07	70.42
43	Quality Assurance Specialist	90.56	95.09	99.84	104.83	110.07	115.57
44	Technical Writer/Editor	48.03	50.43	52.95	55.60	58.38	61.30
45	Senior Technical Writer/Editor	81.91	86.01	90.31	94.83	99.57	104.55

emergint

SIN 132-51: IT Professional Services Labor Rates – OFFSITE (Emergint Facility)

	Labor Category	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Year 6 2011
46	Medical /Clinical Informatics Specialist I	74.92	78.67	82.60	86.73	91.07	95.62
47	Medical /Clinical Informatics Specialist II	74.92	78.67	82.60	86.73	91.07	95.62
48	Medical /Clinical Informatics Specialist III	74.92	78.67	82.60	86.73	91.07	95.62
49	Medical /Clinical Informatics Specialist IV	122.36	128.48	134.90	141.65	148.73	156.17
50	Medical /Clinical Informatics Specialist V	168.59	177.02	185.87	195.16	204.92	215.17
51	Medical /Clinical Informatics Specialist VI	187.32	196.69	206.52	216.85	227.69	239.07
52	Bioinformatics Specialist I	56.19	59.00	61.95	65.05	68.30	71.72
53	Bioinformatics Specialist II	68.68	72.11	75.72	79.51	83.49	87.66
54	Bioinformatics Specialist III	74.92	78.67	82.60	86.73	91.07	95.62

Terms and Conditions Applicable to IT Training, Courses (Special Item Number 132-50)

Payment Terms: Net 30 days
Discount for Prompt Payment: None

Minimum Order: $100.00
Maximum Order: $25,000

Invoice Mailing Address: 455 South Fourth Street
                                            Suite 1250
                                            Louisville, Kentucky 40202

F.O.B.:   Destination

SIN 132-50: IT Training, Courses Labor Rates

Title	User Support Training
Description:	Learn database structure, layout and relationships. The student will understand how to query and interrogate the data so as to allow the user to extrapolate the data into meaningful reports.
Audience:	Data Repository End User Support Personnel
Location:	Emergint Technologies, Inc.
Min Students:	2
Max Students:	10
Duration:	1 day
Outline:	Database Architecture, Relational Database Overview, Sample Queries for Visualization
Prerequisites:	2 years experience with XML also 2 years experience with SQL and relational databases.
Cost:	$1,200 per person

Title	Administrative Support Training
Description:	Learn how to monitor Data Collection and Transformation System (DCTS) application and data anomalies that may occur during normal working processing activities.
Audience:	Systems Administrators and Developers
Location:	Emergint Technologies, Inc.
Min Students:	2
Max Students:	10
Duration:	1 day
Outline:	DCTS Architecture Overview, DCTS Administration Portal Walk-through, DCTS Functional Component Overview, DCTS Logging Walk-through and DCTS Troubleshooting Scenario Walk-through.
Prerequisites:	2 years experience with basic administration tasks on windows and Linux/UNIX.
Cost:	$1,200 per person

Title	Development Support Training
Description:	Learn the system internals of Emergint's Data Collection and Transformation System (DCTS) in order to expand a local installation's functional capabilities.
Audience:	Developers
Location:	Emergint Technologies, Inc.
Min Students:	2
Max Students:	10
Duration:	2 days
Outline:	Day 1: DCTS Architecture Overview and Detail, DCTS, Systems Admin Portal Overview and Detail, DCTS Logging Overview and Detail. Day 2: DCTS Functions (Development Track) Java Detail, and DCTS Data Interface Management (Interface Track)
Prerequisites:	2 years experience Java programming with XML and XSLT familiarity (Development Track) also 2 years experience Data Interface Analyst with HL7 and XML familiarity (Interface Track).
Cost:	$1,200 per person

Labor Category Descriptions

Senior Project Manager

Provides management and technical direction to other program managers as well as program and project personnel. Regularly exercises independent judgment and a high level of analytical skill in solving complex and unusual technical, administrative, and managerial problems. The Senior Project Manager is ultimately responsible for project planning, execution, and performance. Serves as the ETI counterpart to the Government Senior Project Manager. Demonstrates extensive subject matter expertise and communication skills to interface with all levels of management.

Plans, directs, coordinates, and controls technical and administrative activities for programs. Supervises program managers in accomplishing their assigned tasks. Reviews and maintains the quality of technical work performed on the program. Makes technical judgments and provides advice on resolving technical problems.

REQUIRED EXPERIENCE
Minimum five (5) years of experience in a related field including supervisory or management experience. Minimum three (3) years system-specific experience, including requirements definition, work planning, control of budget, schedule, and task execution, contract and subcontract management, and personnel management and supervision.

MINIMUM EDUCATION
B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Project Manager
Responsible for all aspects of project performance. Provides overall direction on all project level activities and to personnel working on the project. Solves complex technical, administrative, and managerial problems and is responsible for interfacing with customer management and technical personnel, preparing reports, delivering presentations, and participating in meetings. Directs the completion of tasks within project estimated time frames and project budget constraints.

Plans, directs, coordinates, and controls technical and administrative activities for an entire program and supervises staff in accomplishing assigned duties. Reviews and maintains the quality of technical work performed on the program. Makes technical judgments and provides advice on resolving technical problems.

REQUIRED EXPERIENCE
Minimum two (2) years of experience in a related field including supervisory or management experience. Minimum one (1) year system-specific experience, including requirements definition, work planning, control of budget, schedule, and task execution, contract and subcontract management, and personnel management and supervision.

MINIMUM EDUCATION
B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree).

Computer Systems Analyst I

Analyzes business or scientific problems for resolution through electronic data processing. Gathers information from users, defines work problems, and, if feasible, designs a system of computer programs and procedures to resolve the problems. Under supervision develops complete specifications or enable Computer Programmers to prepare required programs; analyzes subject-matter operations to be automated; specifies number and types of records, files, and documents to be used and outputs to be produced; prepares work diagrams and data flow charts; coordinates tests of the system and participates in

trial runs of new and revised systems; and recommends computer equipment changes to obtain more effective operations. The Computer Systems Analyst I may also be called upon to write computer programs. Provides entry level systems development support using standard approaches and several phases of the required systems analysis where the nature of the system is predetermined. Uses established fact finding approaches, knowledge of pertinent work processes and procedures, and familiarity with related computer programming practices, system software, and computer equipment.

REQUIRED EXPERIENCE
Minimum one (1) year of computer experience in assignments of a technical nature working under close supervision and direction and experience in analyzing and programming application on large-scale or mid-tier computers (or LAN-based) with experience in the design and programming of moderately complex ADP systems. Education can be substituted for experience.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Computer Systems Analyst II

Analyzes business or scientific problems for resolution through electronic data processing. Gathers information from users, defines work problems, and, if feasible, designs a system of computer programs and procedures to resolve the problems. Develops complete specifications or enable Computer Programmers to prepare required programs; analyzes subject-matter operations to be automated; specifies number and types of records, files, and documents to be used and outputs to be produced; prepares work diagrams and data flow charts; coordinates tests of the system and participates in trial runs of new and revised systems; and recommends computer equipment changes to obtain more effective operations. The Computer Systems Analyst II may also write computer programs.

Provides development services for moderately complex applications using standard approaches or less complex systems using new approaches. Works on a segment of a complex data processing scheme or broad system.

REQUIRED EXPERIENCE
Minimum three (3) years of computer experience in information systems design and management. Must demonstrate an ability to work independently or under general direction on requirements that are moderately complex to analyze, plan, program, and implement. Including two (2) years of experience in analysis and design of business application for complex large-scale or mid-tier computer or LAN-based systems, including experience in DBMS, and use of programming languages. Knowledge of current storage and retrieval methods; one (1) year of systems analysis experience designing technical applications on computer systems; and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Computer Systems Analyst III

Provides high level expertise in developing complex software applications involving new technologies, methods, concepts or approaches. Provides supervisory, technical, and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and user standards, and for progress in accordance with schedules.

REQUIRED EXPERIENCE
Minimum four (4) years of computer experience working independently or under general direction on

complex application problems involving all phases of systems analysis with three (3) years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems, or LAN-based systems, to include experience in database management systems (DBMS), and use of programming languages. Knowledge of current storage and retrieval methods and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs plus two (2) years of general experience supervising personnel performing software development tasks.

MINIMUM EDUCATION
M.A. /M.S. degree or equivalent experience in related field. (Eight (8) years of experience above a Bachelor's degree may be substituted for a Master's degree.)

Computer Systems Analyst IV

Provides senior level expertise in developing complex software applications involving new technologies, methods, concepts or approaches. Provides supervisory, technical, and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and user standards, and for progress in accordance with schedules.

REQUIRED EXPERIENCE
Minimum five (5) years of computer experience working independently on complex application problems involving all phases of systems analysis with four (4) years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems, or LAN-based systems, to include experience in database management systems (DBMS), and use of programming languages. Knowledge of current storage and retrieval methods and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs plus three (3) years of general experience supervising personnel performing software development tasks.

MINIMUM EDUCATION
M.A. /M.S. degree or equivalent experience in related field. (Eight (8) years of experience above a Bachelor's degree may be substituted for a Master's degree.)

Computer Systems Analyst V

Provides broad, high-level knowledge of and expertise in developing complex software applications involving new technologies, methods, concepts or approaches. Provides supervisory, technical, and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and user standards, and progress in accordance with schedules. Supervises multiple teams of analysts who are performing software development tasks.

REQUIRED EXPERIENCE
Minimum seven (7) years of computer experience working independently on complex application problems involving all phases of systems analysis with six (6) years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems, or LAN-based systems, to include experience in database management systems (DBMS), and use of programming languages. Knowledge of current storage and retrieval methods and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs plus five (5) years of general experience supervising personnel performing software development tasks.

MINIMUM EDUCATION
M.A. /M.S. degree or equivalent experience in related field. (Eight (8) years of experience above a Bachelor's degree may be substituted for a Masters.)

Computer Programmer I

Provides entry level programming support using standard approaches. Assists higher level staff by performing elementary programming tasks which concern limited and simple data items and steps which closely follow patterns of previous work done in the organization. Performs routine programming assignments under close supervision. Able to revise existing programs to make refinements, increase operating efficiency or improve present techniques.

REQUIRED EXPERIENCE
Minimum six (6) months of experience in programming. Education may be substituted for experience.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Computer Programmer II

Provides programming services in developing moderately complex applications using standard approaches or less complex systems using new approaches. Performs routine programming assignments that do not require skilled background experience but do require knowledge of established programming procedures and data processing requirements. Maintains and modifies routine programs. Makes approved changes by amending program flow charts, developing detailed processing logic, and coding changes. Tests and documents modifications and writes operator instructions.

REQUIRED EXPERIENCE
Minimum two (2) years of experience in programming.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Computer Programmer III

Provides high level expertise in developing complex software applications involving new technologies, methods, concepts, or approaches. Applies expertise in programming procedures to complex programs; recommends the redesign of programs, investigates and analyzes feasibility and program requirements, and develops programming specifications. Analyzes specification developed by a Systems Analyst for such factors as type and extent of information to be processed, designs detailing logic flow diagrams and program code instructions. Recognizes probable interactions of other related programs with the assigned program(s) and is familiar with related system software and computer equipment. Solves conventional programming problems. May function as team leader.

REQUIRED EXPERIENCE
Minimum four (4) years of experience in programming. In addition to the minimum years of experience individual must have a minimum of two (2) years of supervisory experience if requirements involve the need to function as a team leader.
MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Computer Programmer IV

Provides senior level expertise in developing complex software applications involving new technologies, methods, concepts, or approaches. Applies expertise in programming procedures to complex programs; recommends the redesign of programs, investigates and analyzes feasibility and program requirements, and develops programming specifications. Analyzes specification developed by a Systems Analyst for such

factors as type and extent of information to be processed, designs detailing logic flow diagrams and program code instructions. Recognizes probable interactions of other related programs with the assigned program(s) and is familiar with related system software and computer equipment. Solves conventional programming problems. Functions as a team leader.

REQUIRED EXPERIENCE
Minimum five (5) years of experience in programming plus two (2) years of supervisory experience.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Computer Programmer V

Provides broad high-level knowledge of and expertise in developing complex software applications involving new technologies, methods, concepts, or approaches. Applies expertise in programming procedures to complex programs; recommends the redesign of programs, investigates and analyzes feasibility and program requirements, and develops programming specifications. Analyzes specification developed by a Systems Analyst for such factors as type and extent of information to be processed, designs detailing logic flow diagrams and program code instructions. Recognizes probable interactions of other related programs with the assigned program(s) and is familiar with related system software and computer equipment. Solves conventional programming problems. Provides supervisory, technical and administrative direction for personnel performing programming tasks.

REQUIRED EXPERIENCE
Minimum six (6) years of experience in programming plus three (3) years of supervisory experience.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Database Manager

Analyzes, studies, designs, develops, implements, and/or administers highly complex database applications to accommodate a wide variety of user needs. Through the use of theoretical and commercial knowledge, analyzes and determines informational needs and elements, data relationships and attributes, proposed manipulation, data flow and storage requirements, and data output and reporting capabilities. Manages the development of database projects. Plans and budgets staff and data resources. Supports application developers in planning preparation, load analysis, and back-up and recovery of data. Prepares and delivers presentations on database management systems (DBMS) concepts. Monitors performance and evaluates areas to improve efficiency.

REQUIRED EXPERIENCE
Minimum six (6) years progressively responsible database experience including four (4) years experience with database management systems, system design and analysis, operating systems software, and internal and data manipulation languages and three (3) years supervisory experience.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Database Specialist I

Communicates with management, technicians, and end-users to evaluate needs prior to development of an

automated solution. Under supervision prepares detailed reports which might include system requirements such as concurrent usage factors, data storage requirements, response rates, and discusses procedures for processing data through the use of database management systems (DBMS) including relational databases. Discusses justifications for selection of mainframes, minicomputers, or microcomputers as the host for the proposed system. Knowledgeable of available equipment environment to determine technical approaches and to formulate appropriate solutions. Familiar with data structures, data structure within a DBMS as well as the methods for defining data relationships. Evaluates database design tradeoffs, impacts on user expectations, performance levels, and space allocation requirements. Assists in devising database system solutions taking into account data, information processing, and communication needs. Applies knowledge of fundamental relational database theory and specific product implementation to solve database needs.

REQUIRED EXPERIENCE
Minimum one (1) year of software related experience with six (6) months experience in database specialization. Education may be substituted for experience.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Database Specialist II

Communicates with management, technicians, and end-users to evaluate needs prior to development of an automated solution by preparing detailed reports that might include system requirements such as concurrent usage factors, data storage requirements, response rates, and discusses procedures for processing data through the use of database management systems (DBMS) including relational databases. Devises database system solutions taking into account data information processing and communications needs. Applies knowledge of fundamental relational database theories and specific product implementation to solve database needs. Prepares justifications for selection of mainframes, minicomputers, or microcomputers as the host for the proposed system. Knowledgeable of available equipment environments to determine technical approaches to formulate appropriate solutions. Familiar with data structures, data structure within a DBMS, as well as the methods for defining data relationships. Also evaluates database design tradeoffs, performance levels, and space allocation requirements. Engages in periodic contact with user personnel and may work with non-technical sources as necessary.

REQUIRED EXPERIENCE
Minimum two (2) years of software related duties including one (1) year of database specialization.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Database Specialist III

Applies in-depth knowledge of relational database theory and specific product implementation to solve complex database needs. Defines file organization, indexing methods, and security procedures for specific user applications. Develops, implements, and maintains database back-up and recovery procedures for the processing environments. Exercises independent judgment and initiative in solving problems and performing technical tasks that have a high degree of complexity. Engages in direct contact with user personnel and may work with non-technical sources as necessary.

REQUIRED EXPERIENCE
Minimum five (5) years in database management systems (DBMS) systems analysis and programming including three (3) years of experience in using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Database Specialist IV

Applies senior-level knowledge of relational database theory and specific product implementation to solve complex database needs. Defines file organization, indexing methods, and security procedures for specific user applications. Develops, implements, and maintains database back-up and recovery procedures for the processing environments. Exercises independent judgment and initiative in solving problems and performing technical tasks that have a high degree of complexity. Engages in direct contact with user personnel and may work with non-technical sources as necessary.

REQUIRED EXPERIENCE
Minimum six (6) years in database management systems (DBMS) systems analysis and programming including three (3) years of experience in using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Database Specialist V

Applies broad high-level knowledge of relational database theory and specific product implementation to solve complex database needs. Defines file organization, indexing methods, and security procedures for specific user applications. Develops, implements, and maintains database back-up and recovery procedures for the processing environments. Exercises independent judgment and initiative in solving problems and performing technical tasks that have a high degree of complexity. Engages in direct contact with user personnel and works with non- technical sources as necessary.

REQUIRED EXPERIENCE
Minimum seven (7) years in database management systems (DBMS) systems analysis and programming including four (4) years of experience in using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals.

MINIMUM EDUCATION
M.A/M.S degree or equivalent experience in a related field. Eight (8) years of experience above a Bachelor's degree may be substituted for a Master's degree. Two (2) years experience is equivalent to one (1) year of education. (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Database Analyst

Provides highly technical expertise and support in the use of database management systems (DBMS). Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications. Develops, implements, and maintains database back-up and recovery procedures for the processing environments, and ensures that data integrity, security, and recoverability are built into the DBMS applications.

REQUIRED EXPERIENCE
Minimum two (2) years experience in using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals.

MINIMUM EDUCATION

B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education. (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Subject Matter Expert I

Develops requirements from a project's inception to conclusion in the subject matter area, for simple to moderately complex systems under supervision. Assists senior consultants with analysis, evaluation and the preparation of recommendations for improvements, optimization, development, and/or maintenance efforts in the following specialties:

- Automation
- Communications Protocols
- Data Warehousing
- Electronic Mail (E-mail)
- Graphics Processing
- Information Systems Architecture
- Life-Cycle Management
- Modeling and Simulation
- Networking
- Risk Management/Electronic Analysis
- Software
- Software Development Methodologies
- Telecommunications
- Database Analysis/Development
- Client-Specific, System-Specific, or Mission-Critical Proficiencies

REQUIRED EXPERIENCE

Minimum two (2) years of subject matter experience. Education may be substituted for experience.

MINIMUM EDUCATION

B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree).

Subject Matter Expert II

Defines the problems and analyzes and develops plans and requirements in the subject matter area for moderately complex to complex systems. Coordinates and manages the preparation of analysis, evaluations, and recommendations for proper implementation in the following specialties:

- Automation
- Communications Protocols
- Data Warehousing
- Electronic Mail (E-mail)
- Graphics Processing
- Information Systems Architecture
- Life-Cycle Management
- Modeling and Simulation
- Networking
- Risk Management/Electronic Analysis
- Software
- Software Development Methodologies
- Telecommunications
- Database Analysis/Development
- Client-Specific, System-Specific, or Mission-Critical Proficiencies

REQUIRED EXPERIENCE

Minimum four (4) years experience in specified subject matter. Including two (2) years of combined new and related older technical experience in directly related to the required area of expertise.

MINIMUM EDUCATION

M.S. /M.A. degree. Eight (8) of relevant experience above a Bachelor's degree may be substituted for a Master's degree.

Subject Matter Expert III

Provides technical, managerial, and administrative direction for problem definition, analysis, requirements development and implementation for complex to extremely complex systems in the subject matter area. Makes recommendations and advises on organization-wide systems improvements, optimization or maintenance efforts, in the following specialties:

- Automation
- Communications Protocols
- Data Warehousing
- Electronic Mail (E-mail)
- Graphics Processing
- Information Systems Architecture
- Life-Cycle Management
- Modeling and Simulation
- Networking
- Risk Management/Electronic Analysis
- Software
- Software Development Methodologies
- Telecommunications
- Database Analysis/Development
- Client-Specific, System-Specific, or Mission-Critical Proficiencies

REQUIRED EXPERIENCE

Minimum six (6) years experience in subject matter area including three (3) years of combined new and related older technical experience in directly related to the required area of expertise.

MINIMUM EDUCATION

Ph.D. or M.A. /M.S. degree. Eight (8) years of subject specific experience above a Master's degree may be substituted for a Ph.D.

Subject Matter Expert IV

Provides technical, managerial, and administrative direction for problem definition, analysis, requirements development and implementation for complex to extremely complex systems in the subject matter area. Makes recommendations and advises on organization-wide systems improvements, optimization or maintenance efforts, in the following specialties:

- Automation
- Communications Protocols
- Data Warehousing
- Electronic Mail (E-mail)
- Graphics Processing
- Information Systems Architecture
- Life-Cycle Management
- Modeling and Simulation
- Networking
- Risk Management/Electronic Analysis

- Software
- Software Development Methodologies
- Database Analysis/Development
- Client-Specific, System-Specific, or Mission-Critical Proficiencies

REQUIRED EXPERIENCE
Minimum six (6) years experience in specified subject matter. Including three (3) years of combined new and related older technical experience in directly related to the required area of expertise.

MINIMUM EDUCATION
Ph.D., M.D., or other comparable professional degree. No equivalencies.

Subject Matter Expert V

Provides technical, managerial, and administrative direction for problem definition, analysis, requirements development and implementation for complex to extremely complex systems in the subject matter area. Makes recommendations and advises on organization-wide systems improvements, optimization or maintenance efforts, in the following specialties:
- Automation
- Communications Protocols
- Data Warehousing
- Electronic Mail (E-mail)
- Graphics Processing
- Information Systems Architecture
- Life-Cycle Management
- Modeling and Simulation
- Networking
- Risk Management/Electronic Analysis
- Software
- Software Development Methodologies
- Database Analysis/Development
- Client-Specific, System-Specific, or Mission-Critical Proficiencies

REQUIRED EXPERIENCE
Minimum eight (8) years experience in subject matter area including four (4) years of combined new and related older technical experience in directly related to the required area of expertise.

MINIMUM EDUCATION
Ph.D., M.D., or other comparable professional degree. No equivalencies.

Web Developer

Administrates, develops, and maintains web sites using object-oriented programming. Analyzes and determines project definition, scope objectives and requirements of web designs by meeting with client. Accesses web servers and back-end databases. Designs and codes application solutions in support of data repositories and presentation.

REQUIRED EXPERIENCE
Minimum one (1) one year experience in application development associated with network and web systems. Knowledge of Internet, WWW, industry-standard computer operating systems, and network protocols. Demonstrated proficiency in applicable procedures including web page analysis, design, coding, and support of industry-standard applications.

MINIMUM EDUCATION
High School diploma, GED, or equivalent experience in a related field. Relevant course work and training in college, trade school, vocational school, or military.

Network Administrator

Provides system support in a PC/LAN/WAN computer platform environment. Plans and coordinates the installation and maintenance of system and vendor software packages, including operating system software. Also troubleshoots and resolves network problems. Proficient in industry standard software, hardware and operating systems (i.e. Windows NT, Novell, NetWare, bridge and router technology, IBM token ring protocol, and Intel based computer hardware) and specific system administration utilities to assist in the general administration of the network.

REQUIRED EXPERIENCE
Minimum three (3) years system experience with two (2) years as a network administrator, preferably in both local and wide area networking. One (1) year experience supporting a broad base of application with good knowledge of company standard desktop application.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Senior Network Administrator

Provides high-level system support in a PC/LAN/WAN computer platform environment. Plans and coordinates the installation and maintenance of system and vendor software packages, including operating system software. Independently troubleshoots and resolves network problems. Proficient in industry standard software, hardware and operating systems (i.e. Windows NT, Novell, NetWare, bridge and router technology, IBM token ring protocol, and Intel based computer hardware) and specific system administration utilities to assist in the general administration of the network. May be called upon to supervise other network administrators.

REQUIRED EXPERIENCE
Minimum four (4) years system experience with three (3) years as a network administrator, preferably in both local and wide area networking. One (1) year experience supporting a broad base of application with good knowledge of company standard desktop application. Minimum three (3) years supervisory experience if called upon to do supervisory work.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Network Technician

Provides diagnosis and troubleshooting for network systems. Must have Knowledge of TCP/IP, file server applications. Performs diagnostic analysis and identifies solutions to network problems. Performs and implements enhancements to network. Assists with network installations and on site surveys. Assists in assessing and documenting current site network configurations. Prepares engineering plans and site installation technical design packages. Assists in preparation of installation schedules. Performs as an integral member of the network installation team. Assists in the preparation of drawings documenting configuration changes at each site. Prepares site installation and test reports. Coordinates post installation operations and maintenance support.

REQUIRED EXPERIENCE
Minimum two (2) years of network related experience, including in-depth knowledge of applications

software and client configuration, day-to-day administration of the network, installation, updating and upgrading of the network and operations of network products. A minimum of two (2) years experience with Novell NetWare, Windows NT, Internet and/or SNMP as well as knowledge of routing protocol, LAN bridges, cabling, and a variety of computer software is required.

MINIMUM EDUCATION
High School diploma, GED, or equivalent experience in a related field. Course work and training in college, trade school, vocational school, or military.

Senior Network Technician

Provides diagnosis and troubleshooting for network systems. High -level knowledge of TCP/IP, file server applications. Performs diagnostic analysis and identifies solutions to network problems. Performs and implements enhancements to network. Independently works with network installations and on site surveys. Assists in assessing and documenting current site network configurations. Prepares engineering plans and site installation technical design packages. Assists in preparation of installation schedules. The Senior Network Technician is an integral member of the network installation team. Assists in the preparation of drawings documenting configuration changes at each site. Prepares site installation and test reports. Coordinates post installation operations and maintenance support.

REQUIRED EXPERIENCE
Minimum three (3) years of network related experience, including in-depth knowledge of applications software and client configuration, day-to-day administration of the network, installation, updating and upgrading of the network and operations of network products. A minimum of two (2) years experience with Novell NetWare, Windows NT, Internet and/or SNMP as well as knowledge of routing protocol, LAN bridges, cabling, and a variety of computer software is required.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Technical Information Specialist I

Performs work concerned with analyzing, summarizing, and coding the intellectual content of scientific, medical, technological, or other specialized information related to developing and maintaining scientific information systems, including acquisition, analysis of subject content of the documents acquired, indexing and preparation of abstracts or extracts (under supervision). May develop thesauri, list of descriptions, subject heading lists, etc. Analyzes questions from users and performs literature searches; prepares replies in the form of documents, bibliographies, or specific answers to query. Directs, administers, or coordinates technical information services related to information systems. Conducts information searches using online database sources. Work may also include special techniques, methods, and devices of a semi- or fully-automated documentation system.

REQUIRED EXPERIENCE
Minimum one (1) year experience in database software testing and electronic databases. Familiar with web-based search engines. Education may be substituted for experience.

MINIMUM EDUCATION
B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree).

Technical Information Specialist II

Provides user services support for database access and submissions. Provides computer information search and retrieval for engineering and scientific technical staff. Able to answer e-mail and phone queries

on all aspects of production and distribution. Capable of supervising and training other Technical Information Specialists as well as support staff. Familiar with service desk procedures. Provides resource materials and literature searches for a wide variety of projects. Conducts research and production of bibliographies for clients and users. Responsible for deciding which sources to consult, how search strategies are formulated and for reviewing retrieved material for inclusion bibliographies. Responsible for producing final reports.

REQUIRED EXPERIENCE
Minimum two (2) years experience in web development, database software testing and electronic databases. Familiar with web-based search engines. In addition to the minimum years of experience individual must have a minimum of one (1) year of supervisory experience if requirements involve the need to function as a supervisor.

MINIMUM EDUCATION
M.L.S. /M.A. /M.S. degree. Six (6) years of relevant experience above a Bachelor's degree may be substituted for a Master's degree.

Technical Information Specialist III

Provides information and resource materials for client projects, including regulations, chemical information, journal articles, and Government documents. Performs all necessary functions for support of the client library, including collection development and acquisitions, searching databases, the Web, and other electronic sources, answering reference questions, organizing, and publicizing new acquisitions to users.

REQUIRED EXPERIENCE
Minimum five (5) years experience in web development, database software testing and electronic databases. Familiar with web-based search engines.

MINIMUM EDUCATION
M.L.S. /M.A. /M.S. degree. Nine (9) years of relevant experience above a Bachelor's degree may be substituted for a Master's degree.

Training Specialist

Provides technical training and documentation for various software applications in classroom, one-on-one and small group environments. As facilitator, provides structure and ensures progression of working groups and teams by maintaining focus and avoiding unnecessary digression. Works closely with group members to enhance team building, communication, interpersonal relations, meetings, and decision-making processes. Provides support for task teams involved in quality and process improvement projects. Organizes and/or conducts the necessary research to develop and revise training courses. Prepares appropriate training catalogs. The training specialist may also prepare all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars.

REQUIRED EXPERIENCE
Minimum two (2) years of training experience with a fully functional knowledge of applicable industry standard software applications and if required subject matter expertise.

MINIMUM EDUCATION
B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree).

CAD Specialist
Operates computer-aided design (CAD) systems and software peripheral equipment used to resize or

modify architectural and engineering (A&E) drawings geographical information system (GIS) layouts, and any other computer-aided design information.

REQUIRED EXPERIENCE
Minimum four (4) years experience in Information Technologies automated systems, and/or electrical, mechanical, or civil engineering system layout and design systems. Two (2) of the four (4) years should include experience utilizing computer aided CAD equipment.

MINIMUM EDUCATION
High School diploma, GED, or equivalent experience in a related field plus CAD course work and training in college, trade school, vocational school, or military.

Computer Security Systems Specialist

Regulates access to computer data files, monitors data file use, and updates computer security. Provides support to insure applicable government Information Resources Management standards, policies, procedures, guidelines, rules, and regulations are followed for IT security. Develops corporate contingency plans and disaster recovery procedures. May also analyze and define security for Multilevel Security (MLS) issues. Provides high level expertise in developing complex software applications involving new technologies, methods, concepts and approaches. Provides technical and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and user standards. Responsible for progress in accordance with schedules.

REQUIRED EXPERIENCE
Minimum three (3) years of computer experience working independently or under general direction on complex application problems involving all phases of systems analysis, including two (2) years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems or LAN-based systems, to include experience in database management systems (DBMS), use of programming languages, defining computer security requirements for high-level applications, evaluation of approved security product capabilities, and developing solutions to multilevel security (MLS) problems. Knowledge of current storage and retrieval methods and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs.

MINIMUM EDUCATION
B.A. /B.S. degree or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Computer Operator I
Monitors and operates the control console of either a mainframe digital computer or a group of minicomputers, in accordance with operating instructions, to process data. Working under close supervision, work is characterized by the following duties: studies operating instructions to determine equipment setup needed; loads equipment with required items (tapes, cards, paper, etc.); switches necessary auxiliary equipment into system; starts and operates control console; diagnoses and corrects equipment malfunctions; reviews error messages and makes corrections during operation or refers problems; maintains operating record. May test run new or modified programs and assist in modifying systems or programs.

REQUIRED EXPERIENCE
Minimum three (3) months of general experience performing computer operator tasks.

MINIMUM EDUCATION
High school diploma, GED, or equivalent experience in a related field. Course work and training in college, trade school, vocational school, and/or military is qualifying.

Computer Operator II

Monitors and operates the control console of either a mainframe digital computer or a group of minicomputers in accordance with operating instructions, to process data under general supervision. Work is characterized by the following duties: studies operating instructions to determine equipment setup needed; loads equipment with required items (tapes, cards, paper, etc.); switches necessary auxiliary equipment into system; starts and operates control console; diagnoses and corrects equipment malfunctions; reviews error messages and makes corrections during operation or refers problems; maintains operating record. May test run new or modified programs and assist in modifying systems or programs. Processes scheduled routines which present few difficult operating problems (e.g., infrequent or easily resolved error conditions). In response to computer output instructions or error conditions, applies standard operating or corrective procedure. Refers problems that do not respond to preplanned procedure.

REQUIRED EXPERIENCE
Minimum two (2) years of general experience performing computer operator tasks.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Computer Operator III

Monitors and operates the control console of either a mainframe digital computer or a group of minicomputers, in accordance with operating instructions to process data. Work is characterized by the following duties: studies operating instructions to determine equipment setup needed; loads equipment with required items (tapes, cards, paper, etc.); switches necessary auxiliary equipment into system; starts and operates control console; diagnoses and corrects equipment malfunctions; reviews error messages and makes corrections during operation or refers problems; maintains operating record. May test run new or modified programs and assist in modifying systems or programs. May function as a lead operator providing technical assistance to lower level positions. Adapts to a variety of nonstandard problems which require extensive operator intervention (e.g., frequent introduction of new programs, applications, or procedures). In response to computer output instructions or error conditions, chooses or devises a course of action from among several alternatives and alters or deviates from standard procedures if standard procedures do not provide a solution (e.g., reassigning equipment in order to work around faulty equipment or transfer channels); then refers problems. May spend considerable time away from the control station providing technical assistance and assisting programmers, systems analysts, and subject matter specialists in resolving problems.

REQUIRED EXPERIENCE
Minimum four (4) years of general computer operator experience plus two (2) years of general experience supervising personnel and performing computer operator tasks.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Computer Operator IV

Monitors and operates the control console of either a mainframe digital computer or a group of minicomputers in accordance with operating instructions to process data. Work is characterized by the following duties: studies operating instructions to determine equipment setup needed; loads equipment with required items (tapes, cards, paper, etc.); switches necessary auxiliary equipment into system; starts and operates control console; diagnoses and corrects equipment malfunctions; reviews error messages and makes corrections during operation or refers problems; maintains operating record. May test run new or modified programs and assist in modifying systems or programs. May act as a lead operator providing

technical assistance to lower level positions. Adapts to a variety of nonstandard problems which require extensive operator intervention (e.g., frequent introduction of new programs, applications, or procedures). In response to computer output instructions or error conditions, chooses or devises a course of action from among several alternatives and alters or deviates from standard procedures if standard procedures do not provide a solution (e.g., reassigning equipment in order to work around faulty equipment or transfer channels); then refers problems. May spend considerable time away from the control station providing technical assistance and assisting programmers, systems analysts, and subject matter specialists in resolving problems.

REQUIRED EXPERIENCE
Minimum five (5) years of general computer operator experience plus three (3) years of general experience supervising personnel and performing computer operator tasks.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Documentation Specialist

Gathers, analyzes, or composes technical information. Conducts research and ensures the use of proper technical terminology. Translates technical information into clear, readable documents to be used by technical and non-technical personnel. Uses the standard help compiler to prepare all on-line documentation for applications built to run in a Windows environment.

REQUIRED EXPERIENCE
Minimum two (2) years of experience in technical writing and documentation experience pertaining to all aspects of IT including two (2) years of experience in preparing technical documentation, which includes researching for applicable standards.

MINIMUM EDUCATION
A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Graphics Specialist

Uses advanced desktop publishing, page layout, and/or typesetting software to design and develop high quality textual and graphic compositions to communicate complex technical information. Provides computer-based graphic art utilizing a variety of commercial-off-the-shelf software applications to edit and create original artwork and other documents such as certificates, publication, charts, posters, forms, labels, brochures, meeting and conference handouts, slides, posters, and other presentation aids and exhibits. Also maintains basic skills and working knowledge of web development programming tools, including HTML. Develops a system for scheduling and tracking requests for graphics/artwork to insure timely and efficient completion of all work products. Provides graphical user interface design, offers specialized expertise in the design and layout of graphical user interfaces particularly screen layouts and functionality for client-server applications (e.g. Microsoft Windows presentation screens). Conducts studies, testing and evaluation of screen prototypes for functionality, ease of use, efficiency, and accuracy.

REQUIRED EXPERIENCE
Minimum two (2) years experience in graphic arts and design using computer-based applications.

MINIMUM EDUCATION
High School diploma, GED, or equivalent experience in a related field. Course work and training in college, trade school, vocational school, or military is applicable.

Help Desk Specialist

Provides phone and in-person support to users in the areas of e-mail, directories, standard Windows desktop applications, and other applications. May serve as the initial point of contact for troubleshooting network applications, and hardware/software PC and printer problems.

REQUIRED EXPERIENCE

Minimum two (2) years experience. Including one (1) year of experience includes knowledge of PC operating systems, e.g., DOS, Windows, as well as networking and mail standards and work on a help desk. Demonstrated ability to communicate orally and in writing and a positive customer service attitude.

MINIMUM EDUCATION

A.A. /A.S. degree in related field. Two (2) years experience is equivalent to one (1) year of education (i.e. four (4) years experience is equivalent to an Associate's degree.)

Quality Assurance Specialist

Participates in formal and informal reviews to determine quality processes and in the development of software quality assurance (SQA) plans. Evaluates the SQA process and recommends enhancements and modifications. Aids in the development of quality standards.

REQUIRED EXPERIENCE

Minimum four (4) years of experience working with quality control methods and tools. Two (2) years of experience in software testing and integration and a demonstrated knowledge of system and project life cycles.

MINIMUM EDUCATION

B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree.)

Technical Writer/Editor

Assists in collecting and organizing information for preparation of user manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Supports documentation activities such as technical writing, editing, proofreading, production of technical documents, on-line help, and other interactive documentation. Engages in frequent interdepartmental contact and acts as liaison between customers and technical staff. Provides technical writing for program and operational documentation. Provides documentation in presentation-ready quality output using advanced word processing or desk top publishing software.

REQUIRED EXPERIENCE

Minimum three (3) years of experience with one (1) year experience in writing/editing for publication. One (1) of the two (2) years must involve experience with technical or scientific information writing/editing.

MINIMUM EDUCATION

B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree).

Senior Technical Writer/Editor

Collects and organizes information for preparation of user manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Supports documentation activities such as technical writing, editing, proofreading, production of technical documents, on-line help, and other interactive documentation. Engages in frequent interdepartmental contact and acts as liaison between customers and technical staff. Provides technical writing for program and operational documentation. Provides

documentation in presentation-ready quality output using advanced word processing or desk top publishing software.

REQUIRED EXPERIENCE
Minimum five (5) years of experience with three (3) years experience in writing/editing for publication. Two (2) of the three (3) years must involve experience with technical or scientific information writing/editing.

MINIMUM EDUCATION
B.S. /B.A. or equivalent experience in a related field. Two (2) years experience is equivalent to one (1) year of education (i.e. eight (8) years experience is equivalent to a Bachelor's degree).

Medical/Clinical Informatics Specialist I

Assists with data identification and data analysis of medical/clinical terminology in various general medical/clinical subject areas. Enters data into pre-structured vocabulary databases in such a way as to ensure that the data has been entered into medically/clinically appropriate locations within the data hierarchy upon which the data base is structured.

REQUIRED EXPERIENCE
Experience in database utilization and Internet searching techniques. One year in a healthcare provider environment or other setting.

MINIMUM EDUCATION
B.S/B.A or equivalent experience in Nursing, Pharmacology or other health related field.

Medical/Clinical Informatics Specialist II

Assists with data identification and data analysis of medical/clinical terminology in various general medical/clinical subject areas. Enters data into pre-structured vocabulary databases in such a way as to ensure that data has been entered into medically/clinically appropriate locations within the data hierarchy upon which the database is structured.

REQUIRED EXPERIENCE
Three (3) years of clinical or research experience. Experience in database utilization and Internet searching techniques. One (1) year of experience in medical/clinical informatics or related area.

MINIMUM EDUCATION
MS in health related field or BS in health related field with MS in Information Science or related field. Eight (8) years of experience above a Bachelor's degree may be substituted for a Master's degree.

Medical/Clinical Informatics Specialist III

Provides data identification and data analysis of medical/clinical terminology in various general medical/clinical subject areas. Enters data into pre-structured vocabulary databases in such a way as to ensure that the data has been entered into medically/clinically appropriate locations within the data hierarchy upon which the data base is structured.

REQUIRED EXPERIENCE
Five (5) years of clinical or research experience. Experience in data base utilization and Internet searching techniques. Two (2) years of experience in medical/clinical informatics or related area.

MINIMUM EDUCATION

M.S. /M.A degree in Nursing, Pharmacology or other health related field or B.S. /B.A in health related field with MS in Information Science or related field. Eight (8) years of relevant experience above a Bachelor's degree may be substituted for a Master's degree.

Medical/Clinical Informatics Specialist IV

Designs and/or creates medical/clinical vocabulary hierarchies or similar data structures in order to assist in the creation of database systems designed to assist data retrieval effectiveness in clinical and research settings. Identifies, defines and classifies medical/clinical terminology based on knowledge of professionally accepted standards.

REQUIRED EXPERIENCE
Seven (7) years of clinical experience. Experience in utilizing computer search techniques for retrieval of medical/clinical information.

MINIMUM EDUCATION
M.D. or other equivalent professional medical/clinical degree.

Medical/Clinical Informatics Specialist V

Oversees the design and/or creation of medical/clinical vocabulary hierarchies or similar data structures in order to assist in the creation of database systems designed to assist data retrieval effectiveness in clinical and research settings. Identifies, defines and classifies medical/clinical terminology based on knowledge of professionally accepted standards. Integrates medical informatics and bioinformatics topics where applicable.

REQUIRED EXPERIENCE
Nine (9) years of clinical experience. Experience in utilizing computer search techniques for retrieval of medical/clinical information.

MINIMUM EDUCATION
M.D. or other equivalent professional medical/clinical degree. Board Eligible in medical/clinical specialty.

Medical/Clinical Informatics Specialist VI

Oversees the design and/or creation of medical/clinical vocabulary hierarchies utilizing computational technologies in order to assist in the creation of data systems designed to assist data retrieval effectiveness in clinical and research settings. Identifies, defines and classifies medical/clinical terminology based on knowledge of professionally accepted standards. Integrates medical informatics and bioinformatics topics where applicable.

REQUIRED EXPERIENCE
Ten (10) years of clinical experience. Board Eligible in medical/clinical specialty. Experience in utilizing computer search techniques for retrieval of medical/clinical information. One (1) year of experience in informatics or related area.

MINIMUM EDUCATION
M.D. or other equivalent professional medical/clinical degree. Board Certification in medical specialty.

Bioinformatics Specialist I

Under general supervision provides customers with basic understanding of database structures. Familiar with internet searching techniques. Identifies and organizes information in the biological sciences in order

to create or add to database resources for the purpose of solving problems in biology, usually molecular biology. Enters information into appropriate database formats for storage and retrieval.

REQUIRED EXPERIENCE
Zero (0) to two (2) years relevant work experience.

MINIMUM EDUCATION
B.S/B.A or equivalent experience in Nursing, Pharmacology or other health related field.

Bioinformatics Specialist II

Uses clinical and/or research experience to identify, organize, and create information using computational technologies in the biological sciences in order to develop or add to database resources for the purpose of solving problems in biology, usually molecular biology. Deals with methods for storing, retrieving and analyzing biological data, such as nucleic acid (DNA/RNA) and protein sequences, structure, functions, pathways and interactions.

REQUIRED EXPERIENCE
Intermediate understanding of database structures. One (1) year experience with internet searching techniques. At least two (2) years relevant work experience.

MINIMUM EDUCATION
MS in health related field or BS in health related field with MS in Information Science or related field. Eight (8) years of experience above a Bachelor's degree may be substituted for a Master's degree.

Bioinformatics Specialist III

Uses clinical and/or research experience to identify, organize, and create information using computational technologies in the biological sciences in order to develop or add to database resources for the purpose of solving problems in biology, usually molecular biology. Deals with methods for storing, retrieving and analyzing biological data, such as nucleic acid (DNA/RNA) and protein sequences, structure, functions, pathways and interactions. An increased emphasis on acquisition and research of new terminology associated with emerging technologies.

REQUIRED EXPERIENCE
In-depth understanding of database structures. Experience in database utilization and Internet searching techniques. Two (2) years of experience in bioinformatics or related area.

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MINIMUM EDUCATION
M.S/M.A. in health related field or BS in health related field with MS in Information Science or related field. Eight (8) years of experience above a Bachelor's degree may be substituted for a Master's degree.